GUIDELINES FOR TRAFFIC CONTROL PLAN PREPARATION

These guidelines are for preparing Traffic Control Plans (TCP's) in Montgomery County. Closely following these guidelines will result in a more expeditious approval of a TCP. Our experience indicates that these guidelines help develop an acceptable TCP that minimizes inconvenience to the public while assuring safe conditions for workers and all road users including pedestrians and bicyclists.

The involvement of the County's Traffic Control and Lighting Engineering Team in the development of a TCP is limited to *review and approval*. The *preparation* of a TCP is the full responsibility of the preparer. A TCP requires considerable engineering both in the field and office. A TCP will be returned unapproved with only general comments if the TCP cannot be implemented and is not professionally prepared.

- 1. The preparation and concepts of the TCP shall follow those stipulated in the most recent edition of the <u>Manual on Union Traffic Control Devices for Streets and Highways</u> (MUTCD) and any supplements.
- 2. The determination of a suitable sequence of construction is the most difficult aspect of preparing a TCP. It is expected that a logical, practical sequence be articulated based on realistic construction practices and methods. This may require consultation with experienced construction personnel as to the feasibility of a particular sequence of construction. Impacts of utility relocation, pedestrian movements, traffic delays, detours, roadway stability, capacity restrictions, minimum lane widths and safety must be considered. For roadway improvement projects, a proposed sequence of construction should be submitted and approved prior to fully developing a TCP.
- 3. Field checks of the construction site are mandatory prior to and during the preparation of a TCP. It is our experience that inadequate TCP's are prepared in the office without a field investigation by the TCP preparer. In addition, it must be recognized that many of the necessary traffic control devices are located outside the construction limits of a project.
- 4. Specific drawing scales are required to adequately show the locations of advance construction signs, the dimensions for the placement of channelizing devices and pavement markings, or other phases of construction as required. Acceptable scales are 1"=30', 1"=40', and 1"=50'.
- 5. Any considerations for the closure of a road or sidewalk must be carefully reviewed and justified with respect to both the necessity as well as the impact of the closure to the public. Justification for closure, including a detailed analysis of alternatives considered, must be submitted in writing to the Traffic Control and Lighting Engineering Team for review. If acceptable, the recommendation will be forwarded to the Chief, Division of Traffic and Parking Services, for approval. The Chief must concur (in concept) with the proposed road closure prior to the submittal of a TCP that contains the details of how such a closure would be implemented.
- 6. References to typical drawings, taper tables and illustrations in the MUTCD are usually insufficient for use on a specific project. Specific sign messages, sign sizes, taper lengths, barricade or traffic drum spacing, types of barricades, typicals for barrier connections, etc.,

must be site specific and shown on the TCP drawings. Special coding of signs (other than MUTCD numbers R1-1, etc.) will not be accepted. *Typical* urban situations are difficult to find in the "real world." Closely spaced intersections, auxiliary turn lanes, restricted turn lanes, turn prohibitions, short road lengths, short block lengths, traffic signals, the presence of high volume commercial driveways, parking meters, and variable road widths are never illustrated on *typical* drawings. These urban conditions require the careful attention to site specific construction sequence phasing and traffic control device application.

- 7. All special traffic signs (non-standard MUTCD signs) must be designed. Design details required are typical of those shown in the MUTCD supplement <u>Standard Highway Signs</u>. If you are not intimately familiar with the MUTCD, the MUTCD Standard Highway Signs supplement and the MUTCD Standard Alphabets For Highway Signs, it is assumed that you will obtain the services of those who are qualified to do this type work.
- 8. Pavement marking changes must be specific with respect to lane widths, edge line widths, stop line widths, lane line widths and locations, color of lines, lengths of solid lines, taper lengths, length of line removals, placement of arrows and ONLY's, and other dimensions necessary to assure the proper installation of the pavement markings. In addition, if temporary pavement markings are to be removed rather than paved over, the use of "removable detour grade pavement marking tape" must be specified on the drawings. The TCP must specify that the contractor shall be responsible for all pavement marking removal and installation. Any work that is expected from Montgomery County crews must be requested and approved in writing in advance of being shown on the TCP.
- 9. The Traffic Control Requirements in the Montgomery County Work Zone Traffic Control Standards Book is required for permit work and should be shown on the TCP drawings. These requirements may be modified as necessary by the Traffic Control and Lighting Engineering Team.
- 10. Special provisions (additions and/or deletions to the Maryland Department of Transportation, State Highway Administration's <u>Standard Specifications for Construction and Materials</u>, January 2001) are required for all Montgomery County Capital Improvement Project contracts. These special provisions must contain any working restrictions such as days contractor may not work, days detours may not be implemented, hours that lane restrictions are allowed or not allowed, or other restraints that must be considered based on the volume of peak or off peak hours of traffic. A method of measurement and basis of payment must be established for various items of maintenance of traffic.
- 11. Modifications to traffic signals during construction must be specific with respect to the work to be done and as to who will be doing the work. Any work that is expected from Montgomery County crews must be requested and approved in writing in advance of being shown on the TCP.
- 12. It is expected that the required engineering will be completed for a successful TCP prior to the submittal for review by Montgomery County. For a submittal of a TCP to be reviewed by Montgomery County DPWT, Division of Traffic and Parking Services, it must include a complete set of construction plans, TCP special provisions or traffic control requirements and

appropriate TCP drawings with a Professional Engineer's stamp and signature.	